

PCTWELTORGANISATION FÜR GEISTIGES EIGENTUM
Internationales BüroINTERNATIONALE ANMELDUNG VERÖFFENTLICHT NACH DEM VERTRAG ÜBER DIE
INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES PATENTWESENS (PCT)

(51) Internationale Patentklassifikation ⁶ : G02B 6/44	A1	(11) Internationale Veröffentlichungsnummer: WO 99/53353 (43) Internationales Veröffentlichungsdatum: 21. Oktober 1999 (21.10.99)
---	-----------	--

(21) Internationales Aktenzeichen: PCT/DE99/01134
(22) Internationales Anmeldedatum: 15. April 1999 (15.04.99)
(30) Prioritätsdaten:
198 16 740.7 15. April 1998 (15.04.98) DE
(71) Anmelder (für alle Bestimmungsstaaten ausser US): SIEMENS
AKTIENGESELLSCHAFT [DE/DE]; Wittelsbacherplatz 2,
D-80333 München (DE).
(72) Erfinder; und
(75) Erfinder/Anmelder (nur für US): HEINZ, Edgar [DE/DE];
Hirtengrabenstrasse 18, D-96523 Steinach (DE). MÜLLER,
Thomas [DE/DE]; Bettelhecker Strasse 36, D-96515 Son-
neberg (DE). SCHNEIDER, Reiner [DE/DE]; Flurstrasse 32,
D-96237 Ebersdorf (DE).
(74) Gemeinsamer Vertreter: SIEMENS AKTIENGE-
SELLSCHAFT; Postfach 22 16 34, D-80506 München
(DE).

(81) Bestimmungsstaaten: JP, US, europäisches Patent (AT, BE,
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
NL, PT, SE).

Veröffentlicht

Mit internationalem Recherchenbericht.
Vor Ablauf der für Änderungen der Ansprüche zugelassenen
Frist; Veröffentlichung wird wiederholt falls Änderungen
eintreffen.

(54) Title: OPTICAL TRANSMISSION ELEMENT

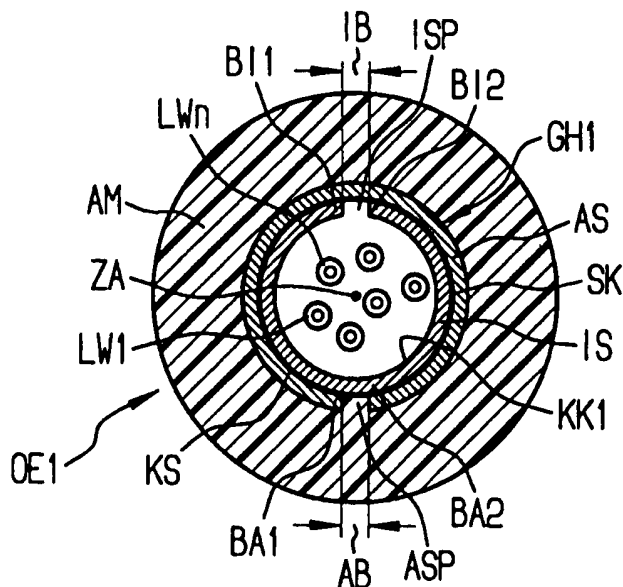
(54) Bezeichnung: OPTISCHES ÜBERTRAGUNGSELEMENT

(57) Abstract

The housing (GH1) of an optical transmission element (OE1) solely comprises of two profiled bodies (AS, IS) which are embodied as a tubular shell with a longitudinal slit (ASP, ISP). Said bodies are inserted into each other in such a way that they provide a substantially circular seal for an individual chamber (GH1) in the form of a protective tube.

(57) Zusammenfassung

Das Gehäuse (GH1) eines optischen Übertragungselements (OE1) ist lediglich aus zwei Profilkörpern (AS, IS) zusammengesetzt, die jeweils als Rohrschale mit Längsspalt (ASP, ISP) ausgebildet sind. Diese sind derart ineinandergesetzt, daß sie lediglich eine einzelne Kammer (GH1) als Schutzrohr möglichst rundum dicht abschließen.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/02734**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G02B 6/44

US CL : 385/100, 101, 102, 103, 113

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 385/100, 101, 102, 103, 113

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONEElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Extra Sheet.**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,715,677 A (SAITO et al) 29 December 1987 (29.12.1987), see entire document.	1-5, 9-11, 13-15, 32-39, 41, 43
X	US 4,632,506 A (TAYLOR) 30 December 1986 (30.12.1986), see entire document.	1-44
X	US 4,852,966 A (KIMMICH et al) 01 August 1989 (01.08.1989) see entire document.	1-5, 9, 13-23, 26, 28, 30, 32-38, 43, 44
X	US 4,239,336 A (PARFREE et al) 16 December 1980 (16.12.1980), see entire document.	1-9, 11, 13-15, 32-39, 43, 44

☐ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

02 MAY 2002

Date of mailing of the international search report

10 JUL 2002

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

JULIANA K. KANG

Telephone No. (703) 305-6259

Deborah P. Vega
Deborah Perry Cooper VEGA
 Paralegal Specialist
 Technology Center 2800

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/02734

B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

EAST

search terms: strength member, conductor, sheet, opening, U nearl shaped, V nearl shaped, water nearl block\$3,
water nearl resist\$4

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/01000

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G02B 6/44

US CL : 385/110

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 385/110, 112

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	US 4,878,733 A [Winter et al.] 07 November 1989, (07/11/1989) See entire document.	1-5, 10, 12, 14- 17, 26-34, 37, 41, 42 ----- 6-9, 11, 13, 18- 25, 35, 36, 38-40, 43-54
X --- Y	US 4,491,387 A [Dey et al.] 01 January 1985, (01/01/1985) See entire document.	1, 2, 6-8, 14, 15, 29, 30, 41, 42 ----- 11, 22, 23, 28, 39



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

23 SEPTEMBER 2002

Date of mailing of the international search report

03 OCT 2002

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-7722

Authorized officer

TULSIDAS C. PATEL *Macaluso*
Telephone No. (703) 308-1736

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/01000

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,495,546 A [Bottoms, Jr. et al.] 27 February, 1996, (27/02/1996) See entire document.	6-8, 13, 18-20, 24, 25, 36, 40, 43-54
Y	US 5,367,971 A [Carpenter et al.] 29 November 1994, (29/11/1994) see entire document.	9, 21, 35